

DOUGHBOYS ON RHINE LEARN WAR AND GERMAN

**Morale of This "Millionaire" Army Is Perfect---
For Study of Vocations, Battle Tactics and
Life Generally the Americans Have Been
Happy in Coblenz---Watching Fluctua-
tions of Exchange Many Build Up Pay**

By DAVID DARRAH.

Special Correspondence to THE NEW YORK HERALD.
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COBLENZ, March 25.

IF Wall Street wants a lesson in high finance it had better pack up and move to the Rhine. About 10,000 American doughboys who are watching this bridgehead for Uncle Sam probably know as much about the gentle art of plunging, covering, selling short, marginal profits, watching market developments and forecasting market trends from the news and all other technicalities of high financiering as any bear or bull in New York knows about the same practice as it relates to Big Nipper, Hill, Industrials or Motors.

However, the khaki financiers on the Rhine are mostly bullish, and they operate in exchange. From lowliest buck to highest ranker, every one can tell you to a fraction just what the fluctuation has been from day to day. And just as the last pages of New York newspapers are devoted to quotations of the Stock Exchange and the Curb, so does the *Amaroc News*, the official army paper of the American forces in Germany, publish exchange quotations. In big type in the corner of the back page every day you'll see something like this:

MARKS LOCALLY.		
	To-day.	Yesterday.
Buy	62	62½
Sell	63	63

After the doughboy looks through the paper to see if President Harding has said anything about withdrawing the American army from the Rhine and glances through the sport page, he settles down to studying the day's quotations on exchange and the variations from yesterday.

Fluctuations of Exchange

Make Marks a Good Gamble

Then he unpacks a bundle of notes which is veritably what is known in good "American" as a Michigan roll, and he figures out what his day's operations will be. Just figure out for yourself how far the doughboy financier can make good in his exchange operations. A buck's pay on the Rhine is now \$36 a month. This means he draws about 2,160 marks a month, not including his insurance. If he is a corporal he gets \$52 a month and has 3,120 marks, and if he is the lowest grade of a sergeant he draws around 5,000 marks a month. Now suppose the corporal with his \$52 buys marks at 60. He gets 3,120 marks. The next day the mark drops to 61, and he sells them for 3,172 marks, and he has made a dollar. This operation he repeats maybe every day and maybe not so often. But almost any doughboy will tell you that he adds a big percentage to his pay every month by what he makes in buying and selling marks.

The inhabitants of Coblenz are not at all displeased at his high financiering, either, strange as it may seem. For, as soon as it became known that the Yank was watching the exchange and buying and selling marks, scores of mushroom banks sprang up over Coblenz. Any one who had a little capital hung a shingle over his door, and his place became a bank. For a time the khaki speculators fared badly, for often they went wrong on the quotations in the German papers.

But now the army itself puts out each day the closing quotations on exchange in Berlin.

The American Soldier Is Healthy.

Bright Eyed and Well Dressed

Some doughboys will tell you that they have made six to seven hundred dollars in exchange buying and selling in a year, and some of them can show bank accounts to prove it.

The American financier who makes his pile on Wall Street and goes to the Riviera and spends his vacation at Monte Carlo has no advantage over the khaki financier on the Rhine. The Riviera weather couldn't have been more perfect than the flood of sunshine that bathed the Rhineland for the

last two months. "It's the life of Riley," as they say it in "doughboy," and there probably never was a better satisfied army, and certainly there is no army in which the morale is higher.

Aside from the uniform and the strict military decorum which each soldier prides himself on maintaining this healthy, bright eyed army of youths might be taken for a crowd on a college campus. Every doughboy is always dressed up except when he is on duty. Perish the thought that he would wear an issue uniform when he strolls down town, listens to a band concert or attends a show, calls on his best girl, or what not. No, your doughboy wears a serge tailor-made uniform, handmade shoes and made to order garrison cap and carries a riding crop, which adds smartness to his uniform and makes him keep his hands out of his pockets. And how he does salute! That's why the French look at him with admiring eyes perhaps and that's why he—but that's another story we'll come to later.

Life on the Rhine is busy and there are no dull moments. A doughboy could not be more comfortable or more taken care of if he were back in the home town making a fat salary. It's a question of deciding how much of the activities going on he can take in.

To begin with, he has his military duties. He drills according to a regular hourly schedule and he goes through large unit maneuvers, for it must be remembered that he is still at war with Germany, and the army is ready. But after that he is free to do much as he pleases. He can get a good education, academic or vocational, if he likes, because Col. Young, educational officer, has established a school for him where he can study almost anything from stenography to political economy, or he can become a blacksmith or a carpenter. He also has a large circulating library in the Fest Hall, where he can find books on any subject. The army on the Rhine is also an army interested in learning. You'll see a khaki clad soldier on almost every corner you pass with a bunch of books under his arm, just coming back from classes as if he were attending college.

The Y. M. C. A. also has an athletic club if he does not get all the exercise he wants and the doughboy may become a champion weight lifter, a sprinter, a swimmer (there's even a swimming pool established), or any kind of athletics are available for which he has propensities.

Then there are all kinds of clubs. The sergeants have a club, for instance; the officers have a club, and the privates, first class, are about to organize one. The Salvation Army offers the doughboy about the costliest and most comfortable place to sink down in an easy chair, drink chocolate and read the paper that he would want in its club, open to all. There are hotels where he can eat regular American food in regular American style. For the doughboy life is plenty of work and also plenty of play and plenty of comforts.

Our Army on the Rhine
Is Called the "Millionaire"

This army on the Rhine is different. It is called the "millionaire army." And that term might be opprobrious if it were not admitted from all sides that the American forces in Germany are about the finest organization of troops and the most efficient along the Rhine. There used to be a time in A. E. F. days also when the doughboy objected to regulations. He doesn't now. For instance, the Provost Marshal of Coblenz recently made new regulations regarding hair cuts. No doughboy may have hair longer than one and a quarter inches. And no doughboy has.

Once every six months the doughboy gets a leave of absence, during which he can visit almost any allied country in Europe he likes at the Government's expense and stay from two to three weeks.

However, the Yanks' activities in high finance, drill, study, athletics, travel and amusement do not keep him from making a lot of friends. The esteem with which he was held in France three years ago has not been lessened along the Rhine. And the inhabitants of the Rhine city generally would be the sorriest people in the world if the Yanks were to be withdrawn. Letters have been sent to Gen. Allen several times lamenting the departure of the Americans when there were rumors of this. For while the Americans have given to this German city such an atmosphere of Americanism that one can feel almost in his home land there, they have done it so easily and without interference that the Germans like it.

The case on the Rhine has been a replica of the case in France during the A. E. F. days. The big strapping youths from Amer-

ica came into the German homes, were billeted with the German people, gave chocolate and candy to the German people, petted the German dog, and of course courted and married the German fraulein. These marriages on the Rhine have been frequent since the order against fraternization has been lifted, but not, of course, so frequent as was reported some time ago by a Paris newspaper, which dilated to the length of a column that every day an American doughboy married a "Gretchen." This innate kindness of the doughboy has stormed Coblenz more effectively than could his infantry and artillery.

Some days ago in Coblenz two American soldiers were billeted in the home of a German woman. Now, the billeting officer needed the place for two officers whose duties required them to live close to the

barracks of their troops. So the two soldiers were ordered to vacate. But the billeting officer reckoned without the host. As soon as the German frau found she was about to lose Bill and Joe things began to get lively, and German was talked so fast and vehemently that the poor billeting officer had no chance at all; so between weeping, protesting and pleading the German woman had her way and Joe and Bill stayed in their billet, another being found for the officers.

Every night along about dark you'll see more than a few scores of Yanks piloting their girls through the streets, escorting them home, and if you listen you will see that they are talking German. But the army assures him when he wants to get married that his prospective wife has the character that he would expect from his wife. So before he can get permission to be

married the German police, whose thoroughness in such matters is meticulous, gives him a full report on the German girl's doings almost from the time she was born. While the army does not hinder marriages, it does not encourage them, and the doughboy who becomes a benedict generally finds within a few weeks that orders transferring him to the States are awaiting him.

After all, however, there is nothing unusual in the way the doughboy has assimilated German life. He did the same in France. Now it is merely that he has ceased saying "c'est Beau" and responds instead, "das ist Schon." The change is merely incidental to the exodus from Gondrecourt and Bar-le-Duc to Andernack and Weissenthurm.

Army officers along the Rhine will tell you that the fact that this large body of troops has been held together has been of

inestimable value to the army. "We never could have accomplished such results in discipline and training if we had not been dealing with a large unit of men. The few units which are found in post or a garrison do not permit the same ease for training. Here there are all branches of the service who can be taught the art of war co-ordinately," one officer said. And in spite of all the activities which the armies encourage for keeping the soldier contented, the doughboy on the Rhine realizes that he is first of all a soldier. In a few weeks there will be spring manoeuvres, during which mimic warfare will be carried out on a large scale. Troops will advance, supported by artillery; airplanes will go over, signalling ranges and information. It will be a demonstration that the Yanks on the Rhine are fit and are ready for anything.

Mooring Mast Latest Thing for Airships

Huge British airship R-33 made fast to the new mooring mast at the Pulham aeronautical station.

**This Simple Aerial
Quay Answers for
Docking Purposes,
Like a Steamship's**

Special Correspondence to THE NEW YORK HERALD.

LONDON, April 1.

NOTHING in aviation has ever crashed harder than the airship business in Great Britain, but still there is in England a small group of experts whose enthusiasm in this branch of flying transcends all Government discouragement. Their latest achievement is the development of the mooring mast, a simple aerial quay that suggests fantastic possibilities for commercial navigation by airship.

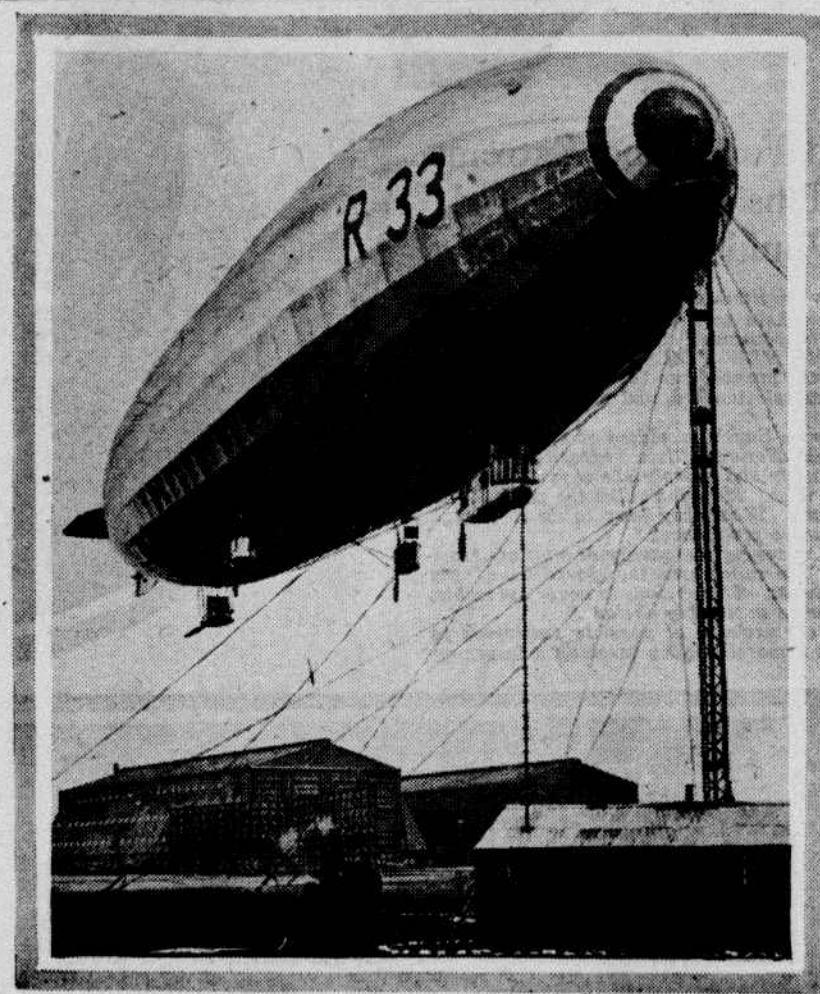
Experiments with this mast are being conducted at Pulham, the lone airship station that will survive the next few weeks of disintegration of the airship service. Pulham is already beginning to show the distress of desolation and disinterest. The personnel is down to the minimum, and experimental work is being handicapped by lack of equipment. The Government has only a few inferior airships left, and it is trying to give those away to any commercial concern that will undertake to operate them, but no company has accepted the offer because the Government offers no financial help.

The reason given for the decay of this service is the shortage of money. Government heads say there is no room in the new budget for such an item. But another reason is that the War Ministry feels that the airship has lost its utility as a war machine. And money is too tight to develop it commercially. So all of England's famous airship stations except Pulham are to be "washed out." The fleet of airships is down to less than half a dozen, of which the R-33, R-36 and R-80 are the best, and in addition there are two or three surrendered Zeppelins, but the work on these is desultory and not very promising.

Not Daunted by Neglect

English Air Men "Carry On"

Yet the experts who built up the service to an efficiency that made possible the first Atlantic flight and which inspired the American Government to contract with England for one of its best type, so that America might learn how it is done, are still carrying on with their old spirit and to the best of their ability under the handicaps. Their mooring mast is a great step forward, be-



cause it puts the big airship in a position to compete with the big steamship.

The present mast is only an experimental affair. It is a steel ribbed tower about three feet square and 115 feet high. At the top is a narrow circular runway and rising above that a single shaft at the summit of which is a revolving universal joint as a coupling device. The very nose of the airship fits into this joint and holds it fast. The revolving shaft permits the ship to ride with nose into the wind regardless of the wind direction and the ship itself is naturally so well streamlined that there is very little strain on the tower.

The R-33 has been moored to this mast at all times when not in flight since February 1. She has weathered some very formidable gales, one as high as eighty miles an hour, and has never had the slightest

difficulty. Yesterday when officials of the field allowed the mast to be inspected a thirty-five mile wind was blowing and the R-33 rested as comfortably as an ocean liner tied to her dock.

The crew mounted the tower by means of a ladder in the centre and stepped from the bridge into the ship itself by means of a six foot rope ladder. The motors were warmed up and then, while they were idling, the ballast was slightly shifted so that the tail dropped at a small angle. At a signal from the control car the latch on the mooring mast was sprung and the great ship, curiously resembling against the blue sky a big mackerel rising slowly in water, went up gently and easily. Another signal from the control car and the power was applied and the ship gradually gained speed and altitude. No steamship ever weighed anchor and left her mooring dock as gracefully and as quickly.

Tying-to was almost as simple. The air-

News Notes of Advances in Aviation the World Over

FIGURES recently submitted to the Royal Aeronautical Society indicate that the present cost of airplane transport is about 3s. 8d. per ton mile, as compared to 2½d. to 3d. per ton mile by rail. The advantage of the airplane lies in its speed, a quality for which the public is always willing to pay.

Lord Montagu of Beaulieu, one of the foremost aeronautical experts of England, recently stated that one of the chief drawbacks of commercial aviation is that at present only short journeys are attempted, such as that between London and Paris, where a saving of only three or four hours is possible. Air transport's greatest opportunity, he believes, will be in longer trips, such as London to Italy, Egypt, and eventually India.

The use of helicopters, heavier than air machines, sustained in the air by propellers revolving on a horizontal plane, will make anchored observation balloons unnecessary in the next war, according to Marquis Pescara of France. The Marquis is the inventor of a machine utilizing helices, permitting it to hover above a fixed point, an impossibility for an airplane.

The Titania, a flying boat destroyer, or aerial cruiser, is being perfected in England. The new "ship" will be used in long distance patrols, having a range of 1,500 miles. The motive power is to be two 1,000 horsepower Cub motors. The plane will carry a crew of ten men, and in peace time could be devoted to carrying fifty passengers.

The greatest subject of discussion to-day in aeronautical circles is the coming duel between airplanes carrying bombs weighing from one-half to one ton and useless German battleships turned over to this country. The Air Service officers contend that one airplane can destroy with a single bomb the most modern, most thickly armored and most expensive dreadnought ever turned out.

That commercial wars in the air are coming is indicated by the fact that the airplane

rate between England and France, which a year ago was \$75, has now been cut to \$17.50. English companies declare they can no longer make a profit on cross Channel flights. French companies are receiving a subsidy.

Reports from abroad indicate that four air routes running out of Berlin have been established and are in operation. The longest of these are the Berlin-Dortmund and the Berlin-Koenigsberg routes, each about 300 miles. The others are the Berlin-Bremen and Berlin-Dresden lines.

If discussion gives any indication of coming performance, Great Britain will be the first nation to put into operation a regular transatlantic airship service. This subject receives much attention from both press and magazines. One writer, Major C. C. Turner, said recently in the *Observer* that there is no reason why a limited service should not be attempted within the next two years.

Destruction of the power of Mad Mullah, ruler of Somaliland, Africa, an accomplishment the British authorities have been working on for the last thirty-four years, was finally accomplished in a campaign of three weeks. It was announced recently. Two hundred air officers and men, with eleven fighting planes, did the feat by aerial bombardments.

Since the war the engineering division of the Air Service has developed many different types of motors. The most unusual of these are a 700 horsepower motor and a 1,000 horsepower engine with eighteen cylinders.

Some idea of the reliability of parachutes was given recently in a lecture by Air Commodore E. M. Maitland, who flew across the Atlantic in the R-34, England's big dirigible. Commodore Maitland said that during the war 750 kite balloon observers were compelled to jump for their lives when their balloons were fired, and only three parachutes failed to open.

Although airplanes can now be constructed for little more than a high priced automobile, dirigibles are much more costly, despite the fact they are regarded in ground circles as

merely huge bags filled with gas. A commercial dirigible, built in England, would now cost from \$300,000 to \$400,000. It is stated, and in addition to this a huge and expensive hangar, or mooring station, would be needed.

Although much criticism has been levelled at this country for failure to maintain its aeronautical industry, Great Britain has not done much better, according to Gen. Sir W. S. Branker, who charged at a recent English meeting that his country now had a fine Civil Aviation Department but no civil aviation.

Although the American Air Service is small, it is well scattered about our possessions, as a recent report from the Philippines indicated. There are in the islands two aero squadrons, an aerial photo section and two balloon companies, all in active operation over the Pacific possessions.

Lieut. C. C. Moseley, winner of the Pulitzer trophy in a 600 horsepower Packard-Verville airplane, recently demonstrated his versatility in the flying line by making a successful test flight in the Messenger, one of the smallest planes in the world, designed by the engineering division of the air service to take the place of a motorcycle in dispatch carrying. The flight was from Washington to Langley Field, Va., a distance of 138 miles. The plane has a wing span of twenty feet.

Through the operation in 1920 of a few airplanes in the forest fire patrol service there was saved from destruction \$35,000,000 worth of standing timber, according to the *Aircraft Year Book* for 1921. Between 900 and 1,000 fires were spotted by aerial observers.

Some of the greatest post war improvements in guides for night flying are in use at the aviation port of Waddon, England. In addition to an aerial lighthouse and great lights casting great vertical beams, making it as certain to direct an airplane as it is to direct a train over steel rails, there is an elaborate system of landing lights, indicating the direction of the landing and the exactable according to the direction of the

**One May Be Built Here
to Receive R-38
When She Makes
Her Trial Trip**

ship, coming into the wind, got her position about the tower and then gradually sank until a crewman in the nose dropped a small cable which was caught by a man on the tower. A winch drew the nose down, the lock was sprung and the ship was made fast for the crew to step out.

Pipes run up the tower, through which fuel and gas and water for ballast are pumped. While moored the airship is ballasted to ride on an even keel, and the "watch" is kept constantly to do any "trimming" of ballast made necessary by changes in weather conditions. Ordinary repairs are made while the ship is moored to the tower, and recently, when it became necessary to rebuild the nose of the R-33, Engineer Sellers did the work at night under the glare of a searchlight, merely to prove that it could be done without going to the trouble of bringing the ship into the hangar.

This tower now in operation is a very crude affair, according to Major Scott, who was commander of the R-34 on its transatlantic flight. He has already drawn up plans for a more efficient mast under the same principle. The new mast will have a lift to carry the men and officers of the crew to the top of the tower, and an enclosed companionway will enable them to pass from the tower of the airship without danger or inconvenience. In this manner civilian passengers could be taken aboard and debarked without risk.

Long Step in Development Of Commercial Aviation

The mooring mast points the way to a big future in commercial airship flying. A tower could be erected on the top of a large building in the heart of London, Major Scott says, and the airship could moor there to take on passengers, mail and, in the coming days of development, freight. An airship such as the R-38, the ship America is buying will be, when completed, will be able to cross the Atlantic within forty-eight hours and, with an outlay of less money than it takes to erect a hangar, tie to over Fifth and Broadway and remain there safely until the next sailing date. The mast means a great saving in personnel expense and in running costs of bases. The ship can tie in almost any reasonable wind and by day or night. Major Scott thinks the future mast should be about 160 feet high, with the receiving gear at the top considerably larger and more simplified.

America should have a mooring mast to receive the R-38 when she arrives, Major Scott thinks. He says any great airship should ride in her appointed element, the air, just as a great liner must keep to the water. With such towers erected at points all over the United States, the R-38 will be able to tour from coast to coast and the expense involved will be comparatively trivial.

A new adaptation of the parachute has been experimented upon by the Army Air Service. This consists of carrying the parachute in the rear of the fuselage with certain special equipment. When accident makes it necessary for the pilot to leave his plane in midair he simply pulls a lever, disconnecting himself and a section of the rear of the fuselage from the rest of the plane.

Airplanes of the Canadian Air Force during 1920 made 398 flights of a total mileage of 33,612 without a single death or serious injury to the fliers. Flying operations did not begin until late in August, but among the exploits carried out was an aerial trip from Halifax to Vancouver.

To Canadians goes the distinction of proposing one of the most novel uses ever conceived for an airplane. Winnipeg men are reported to be organizing an aerial irrigation company. The aim is to cause rain by spraying liquid air in the clouds from an airplane, thus causing the moisture to condense. Recently dust was thrown from an airplane on the clouds 5,000 feet high in an unsuccessful attempt to cause rain in Pretoria.

Edu Chaves, Brazilian aviator, recently flew from Rio Janeiro, Brazil, to Buenos Aires, Argentina, in less than five days. Flying a Curtiss Oriole with K-6 motor, the pilot covered the 1,735 miles on his route in twenty hours and twenty minutes. Several previous aerial efforts to link the two capitals had failed.

Plans are being made to have all students in the Reserve Officers' Training Corps who have signified their preference for the Air Service meet at a summer camp to be held at Post Field, Fort Hill, Okla. A six weeks' course in training for observers will be given, at the end of which successful candidates will receive commissions and proceed to another field for training as pilots.

Gair's Recollections of Lincoln

COL. ROBERT GAIR of Brooklyn in "My Recollections of Lincoln," a booklet just off the press, recalls in a most delightful way the sublime traits of the Great Emancipator as they were impressed upon the soldier's mind through personal observation in the stirring days of the civil war. Col. Gair's regiment was the Seventy-ninth Highlanders, which went into the United States service 1,087 strong, and was mustered out with only 200.

The Highlanders, on reaching Washington, were assigned to make Georgetown College their headquarters.

"I remember well how, in the engagements that followed," writes Col. Gair, "our regiment had the opportunity of seeing a great deal of Lincoln, and while we were encamped on the Potomac his family sometimes came with him. But it was after some of our awful disasters that he would come down to visit his boys and solace them. It was then that he showed how great was his heart and his humanity. He came quietly, no blare of trumpets. He sought out the wounded and gave comfort where he could to the troops. He was constantly trying to do good. No wife whose husband, nor mother

whose son was in trouble appealed in vain for a reprieve or pardon to Lincoln's benevolence. He always had time to say a hearty word to the robust and tell something consoling to the discouraged."

Col. Gair tells of some of the major movements in which the Seventy-ninth took part, and then continues:

"But I must tell you of a trait of Lincoln's which to me seemed the very one that lightened the pressure of his problems and often turned foes into friends. The White House was a mecca to which delegation after delegation from different States pilgrimaged. Each had a story of its own. All had some new suggestion, some important advice for the great leader, and they were mainly a medley of conflicting ideas. But Lincoln received these delegations with a mind worn with care, nevertheless with a smiling face and extended hand. He always initiated the conversation and told a mirth provoking joke or two that upset the dignity of the delegation. He was soon heartily shaking hands with them again, while they were being escorted to the door, their mission unfulfilled, holding counsel while they walked down Pennsylvania avenue as to what they would tell their constituents when they got back. Nevertheless they left the President with a kindly feeling."